



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,286	12/20/2001	Matthew J. Dejncka	SP01-371	1375

22928 7590 02/27/2006

CORNING INCORPORATED  
SP-TI-3-1  
CORNING, NY 14831

EXAMINER

DO, PENSEE T

ART UNIT	PAPER NUMBER
----------	--------------

1641

DATE MAILED: 02/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/027,286

Applicant(s)

DEJNEKA ET AL.

Examiner

Pensee T. Do

Art Unit

1641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 November 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3,5-17,19,20 and 22-25 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1, 3, 5-17, 19, 20, 22-25 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Appeal Brief***

In view of the Appeal Brief filed on November 25, 2005, PROSECUTION IS HEREBY REOPENED. The new grounds of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

### ***Withdrawn Rejection(s)***

The 112, 1<sup>st</sup> rejection in the final office action is withdrawn herein.

The 102 rejection is withdrawn herein.

### ***Maintained Rejection(s)***

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3, 5-17, 19, 20 and 22-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite for reciting "adapted to" because it is unclear of how the unique identification code is modified to be adapted to identify a functional group attached thereto.

***New Grounds of Rejection***

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 16, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kardos et al. (US 6,159,686).

Kardos teaches a label comprising of phosphor particles derived from phosphor host materials, each doped with at least one activator couple. Suitable host materials are sodium yttrium fluoride, lanthanum fluoride; etc...Suitable activator couples are ytterbium/erbium, ytterbium/thulium; and ytterbium/holmium. By combination of host materials with activator couples, at least three phosphors with at least three different emission spectra are provided. Since Kardos teaches doping the particle with rare earth materials, it is inherent that Kardos provides a unique identification code. The phosphor host materials each doped with at least one activator couples as described above are the means of providing a unique identification code and it is also inherent that the rare earth materials are arranged in a pattern to provide the unique identification code because Kardos teaches using a combination of rare earth materials such as activator

Art Unit: 1641

couples as described above. Generally, the absorber is ytterbium and the emitting center can be selected from erbium, holmium, terbium, and thulium. (see col. 14, lines 15-63). The phosphor particles can be coated with a polycarboxylic acid and various proteins (immunoglobulin, streptavidin, or protein) can be physically adsorbed to the surface of the phosphor particles. Probes such as proteins or polynucleotides may be directly attached to the phosphor by covalent linkage. (see col. 13, lines 13-30). A water-insoluble polyfunctional polymer which exhibits glass can be used to coat the up-converting phosphors. (see col. 19, lines 9-12). The phosphor particles have a diameter of about 0.01 to 3 microns and larger or smaller particles can be used. (see col. 17, lines 31-32).

Kardos fails to teach that the diameter of the phosphor particles is 10 to 100 microns.

It would have been obvious to one of ordinary skills in the art to use the phosphor particles with a diameter ranging between 10 to 100 microns since Kardos teaches that larger particles (than 3 microns) can be used.

#### ***Remarks***

Claims 5-15, 19, 20, 22-25 are free of prior arts.

#### ***Response to Arguments***

Applicant's arguments filed on November 5, 2005 have been fully considered but they are not persuasive.

Applicant's arguments with respect to claims 1, 3, 16-17 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 1641

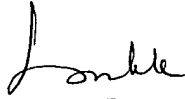
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pensee T. Do whose telephone number is 703-308-4398. The examiner can normally be reached on Monday-Friday, 7:00-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on 703-305-3399. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pensee T. Do  
Patent Examiner  
February 17, 2006

  
LONG V. LE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600  
02/21/06